



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/668,086

09/22/2003

Ki Mun Kim

110989-009

1266

22429

7590

12/08/2008

LOWE HAUPTMAN HAM & BERNER, LLP  
1700 DIAGONAL ROAD  
SUITE 300  
ALEXANDRIA, VA 22314

EXAMINER

CHEEMA, UMAR

ART UNIT

PAPER NUMBER

2444

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,086	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> UMAR CHEEMA	<b>Art Unit</b> 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/14/2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meadows et al (US Patent # 6,716,101) in view of Lim et al (US Patent # 6,259,923) and further in view of Sheynblat et al (Sheynblat) (US 6,677,894).

4. Regarding claim 1, Meadows substantially discloses a method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based TCP/IP (Transmission Control method and a Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center (MPC), a home location register (HLR), and a position determination Entity (PDE) (see detail description of the fig. 1), comprising the steps of: a terminal connecting to a client server for being provided a location based service(LBS) (see col. 4, lines 61-66; fig. 1, network-based location system (13)); said client server carrying out an authentication and selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method; in case of a TCP/IP-based method being selected, said client server transmitting a PDE URL to MS, and then sending an information by a signal to MPC (see col. 2, lines 1-15; providing location information to an authorized user through the world wide web); and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC; said MPC transmitting a request signal for the information of said MS to HLR and receiving the response (see col. 4, lines 18-39);

Art Unit: 2444

after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE; said PDE obtaining the location information of said MS from said MS by the selected type of method; and said PDE transmitting the obtained location information of said MS to said client server through said MPC (see col. 6, lines 55-67).

5. Meadows discloses substantially the invention as claimed for the reason above however Meadows does not disclose wherein selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method. However in the same field of invention Lim discloses wherein selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method (see Lim: col. 3, lines 32-35, 45-49; TCP/IP and Data\_Burst\_msgsee, col. 3; detail description of the preferred embodiments; figures 1-2; lines 25-35, 45-66; data exchange by short message peer to peer protocol (SMPP) based on TCP/IP and between the CLC and SMSC). Likewise Sheynblat discloses wherein selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS

Art Unit: 2444

with said PDE via a TCP/IP network in said TCP/IP-based method (see Sheynblat: abstract, figures 2A-B, 3, 7-10 and the details related to figures, col. 4, line 32-col. 5, line 23; location-based information (i.e., information specific to a client's location or a location of interest to the client) to a client, which may be a mobile SPS receiver, via the Internet and in particular, the World-Wide Web).

6. It would have been obvious to one of the ordinary skill in the art of network at the time of the invention to combine the teaching of Meadows, Lim and Sheynblat for a method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based TCP/IP (Transmission Control method and a Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network. Motivation for doing so would have been that it helps monitoring the geographical location of individuals within a geographical region from a remote location (see Meadows: col. 8, lines 7-9).

7. Regarding claim 2, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said terminal connecting to said client server is a terminal able to connect to a client server using a wireless application protocol (WAP) such as a cellular phone, a personal digital assistant (PDA), or the like (see col. 7, lines 19-21; wireless cellular telephones, personal digital assistants, and interactive pagers).

8. Regarding claim 3, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based

Art Unit: 2444

method as claimed in Claim 1, characterized in that, in said step of selecting one of said DBM-based method and said TCP/IP-based method, said client server decides to select a TCP/IP-based method if said terminal connected to said client server is identical to said MS whose location information provided is to be provided, and otherwise, said client server decides to select a DBM-based method (see col. 2, lines 1-15).

9. Regarding claim 4, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS through the communication line, using WAP, established already (see col. 5, lines 36-45; wireless communication device).

10. Regarding claim 5, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that, in said step of transmitting a PDE URL to said MS in case of TCP/IP-based method being selected, said client server transmits said PDE URL to said MS using a short message service (SMS) (see col. 6, lines 52-55; short text message).

11. Regarding claim 6, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said signal, sent to said MPC, from said client server contains the information on the selected type of method for providing the service (see col. 2, lines 35-42).

Art Unit: 2444

12. Regarding claim 7, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said information of MS, requested by said MPC to said HLR, contains the number of said MS and the information on the mobile switching center (MSC) controlling said MS (see col. 4, lines 1-16).

13. Regarding claim 8, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said corresponding information contained in said signal, being transmitted from said MPC to said PDE after said MPC receiving said response from said HLR, contains the information on the type of method selected by said client server and the information on the mobile switching center (MSC) controlling said MS (see col. 4, lines 24-38).

14. Regarding claim 9, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of: in case that said selected type of method is a DBM-based method, said PDE that received said signal transmitted by said MPC requesting a GPS location information of said MS to said MS; and said MS that received said request transmitting the GPS location information to said PDE (see col. 5, lines 5-12).

15. Regarding claim 10, the combination of Meadows and Lim disclose a method for providing the location information of an MS by selectively using a DBM-based method

Art Unit: 2444

and a TCP/IP-based method as claimed in Claim 9, Lim further discloses characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by SMS-based communication complying with IS-801-1 standard (see Lim: col. 3, 48-67, col. 4, lines 1-3).

16. Regarding claim 11, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized in that said step of said PDE obtaining the location information of said MS from said MS by the selected type of method comprises the steps of: in case that said selected type of method is a TCP/IP-based method, said MS that received a PDE URL from said client server connecting to said PDE by using said PDE URL; and said MS that connected to said PDE providing its own GPS location information to said PDE (see col. 4, lines 52-60).

17. Regarding claim 12, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11, characterized in that said step of received a PDE URL from said connecting to said PDE by using includes the step of said PDE that said MS that client server said PDE URL received a signal transmitted by said MPC waiting for said connection by said MS (see col. 5, lines 36-45).

18. Regarding claim 13, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11, characterized in that said step of said MS that connected to said PDE providing its own GPS location information to said PDE

Art Unit: 2444

comprises the steps of: said PDE requesting a GPS location information to said MS connected to said PDE; and said MS providing the GPS location information to said PDE in response to said request (see col. 4, lines 52-60).

19. Regarding claim 14, the combination of Meadows and Lim disclose a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 11, 12, or 13, characterized in that the transmission/reception of the information between said PDE and said MS is being carried out by TCP/IP-based communication complying with IS-801-1 standard (see Lim: col. 3, 48-67, col. 4, lines 1-3).

20. Regarding claim 15, Meadows discloses a method for providing the location information of an MS by selectively using a DBM-based method and a TCP/IP-based method as claimed in Claim 1, characterized by further comprising, after the step of said PDE transmitting the location information of said MS to said client server through said MPC, the step of providing a corresponding location based service (LBS) requested by said terminal connected to said requested by said client server by using said location information of said MS received by said client server (see col. 4, lines 61-66; fig. 1, network-based location system (13)).

21. Regarding claim 16, Meadows substantially discloses a method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based method and a TCP/IP (Transmission Control Protocol/Internet Protocol)-based method based on a global positioning system (GPS) in a mobile telecommunication network, constituted of a client server, a mobile positioning center

Art Unit: 2444

(MPC), a home location register (HLR), and a position determination Entity (PDE) (see detail description of the fig. 1), comprising the steps of: a terminal connecting to a client server for being provided a location based service(LBS) (see col. 4, lines 61-66; fig. 1, network-based location system (13)); said client server carrying out an authentication and selecting a method among a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method; in case of a TCP/IP-based method being selected, said client server sending an information by a signal to MPC, and then transmitting a PDE URL to MS (see col. 2, lines 1-15; providing location information to an authorized user through the world wide web); and in case of a DBM-based method being selected, said client server sending an information by a signal to MPC; said MPC transmitting a request signal for the information of said MS to HLR and receiving the response (see col. 4, lines 18-39); after receiving said response, said MPC transmitting a signal, containing the corresponding information, to PDE; said PDE obtaining the location information of said MS from said MS by the selected type of method; and said PDE transmitting the obtained location information of said MS to said client server through said MPC (see col. 6, lines 55-67).

22. Meadows discloses substantially the invention as claimed for the reason above however Meadows does not disclose wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based

Art Unit: 2444

method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method. However in the same field of invention Lim wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method (see Lim: col. 3, lines 32-35, 45-49; TCP/IP and Data\_Burst\_msgsee, col. 3; detail description of the preferred embodiments; figures 1-2; lines 25-35, 45-66; data exchange by short message peer to peer protocol (SMPP) based on TCP/IP and between the CLC and SMSC). Likewise Sheynblat discloses wherein selecting one of a DBM-based method and a TCP/IP-based method, wherein said MS communicates said location information of said MS with said PDE via data burst messages in said DBM-based method, wherein said MS communicates said location information of said MS with said PDE via a TCP/IP network in said TCP/IP-based method (see Sheynblat: abstract, figures 2A-B, 3, 7-10 and the details related to figures, col. 4, line 32-col. 5, line 23; location-based information (i.e., information specific to a client's location or a location of interest to the client) to a client, which may be a mobile SPS receiver, via the Internet and in particular, the World-Wide Web).

23. It would have been obvious to one of the ordinary skill in the art of network at the time of the invention to combine the teaching of Meadows, Lim and Sheynblat for a method for providing the location information of a mobile station (MS) by selectively using a data burst message (DBM)-based TCP/IP (Transmission Control method and a Protocol/Internet Protocol)-based method based on a global positioning system (GPS)

Art Unit: 2444

in a mobile telecommunication network. Motivation for doing so would have been that it helps monitoring the geographical location of individuals within a geographical region from a remote location (see Meadows: col. 8, lines 7-9).

24. Regarding claims 17-30, the limitations of these claims has already been addressed (see claims 2-15 above).

### ***Conclusion***

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/668,086  
Art Unit: 2444

Page 13

/U. C./  
Examiner, Art Unit 2444

/William C. Vaughn, Jr./  
Supervisory Patent Examiner, Art Unit 2444